

GOVERNMENT OF INDIA
MINISTRY OF COMMERCE AND INDUSTRY

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R E P O R T
OF THE
INDIAN TARIFF BOARD
ON THE CONTINUANCE OF PROTECTION TO THE
GRINDING WHEELS INDUSTRY

BOMBAY
1951

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GOVERNMENT OF INDIA
MINISTRY OF COMMERCE AND INDUSTRY

RESOLUTION
(Tariffs)

New Delhi, the 20th May, 1952.

No. 16(4)-T.B./51.- The Tariff Board has submitted its report on the continuance of protection to the Grinding Wheels Industry. Its recommendations are as follows:-

- (1) The protective duty on grinding wheels and segments of all kinds, other than those which are to be excluded from the scheme of protection, should be reduced from the existing rate of 105 per cent. *ad valorem*, including surcharge to 47½ per cent. *ad valorem* excluding surcharge or 50 per cent. *ad valorem*, including surcharge.
- (2) The following types and sizes of grinding wheels should be excluded from the scheme of protection:-
 - (i) Grinding wheels having (a) more than 21" diameter or (b) less than 1/8" or more than 7½" thickness or (c) more than 12½" bore;
 - (ii) Diamond impregnated wheels;
 - (iii) Thread grinding wheels; and
 - (iv) Natural grinding stones of any shape or size.

industry should continue to receive protection a further period of 3 years from 31st December, but in view of the uncertainty regarding the trend of import prices and the changes caused by the firm in its pattern of production, the term of protection should be reviewed towards 1953.

of grinding wheels which are to be excluded from the scheme of protection should be levied a revenue duty of 31½% *ad valorem*.

The Tariff Board should take all possible steps to diversify the varieties and should also endeavour to build up the stocks of the varieties of grinding wheels in general demand and of those required by their regular customers.

- (6) In addition to limiting the aggregate quantum of imports to the amount required to bridge the gap between domestic demand and production, preference should be given to imports of those types of grinding wheels and segments which the domestic industry does not propose to produce for the time being.
- (7) The existing policy of placing all Government orders with the domestic industry for the varieties of grinding wheels and segments which can be manufactured locally should be continued.
- (8) The concession hitherto granted to Grindwells to import synthetic abrasive grains free of duty should be continued up to 31st December, 1952 and extended to the new unit to be established by Messrs. Krishna Lal Thirani, if it comes into production before that date.

2. Government accept the recommendations of the Tariff Board subject to the following modifications:-

- (i) The protective duty will be reduced to 50% *ad valorem* exclusive of surcharge;
- (ii) Thread Grinding Wheels will not be excluded from the scheme of protection;
- (iii) The revenue duty on the de-protected categories of grinding wheels will be fixed at 25% *ad valorem* plus the usual surcharge.

3. Necessary steps will be taken to implement the recommendations.

K.N. KAUL,

Joint Secretary to the Govt

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**REPORT ON THE CONTINUANCE OF PROTECTION TO THE
GRINDING WHEELS INDUSTRY**

1. Under paragraph 2 of the Government of India,
Origin of the inquiry. Ministry of Commerce, Resolution No. 30-T(1)/48
dated 6th August, 1948, the Board is required
to maintain a watch over the progress of the protected industries and to advise Government regarding the necessity or otherwise of modifying the protection or assistance granted. The protection granted to the grinding wheels industry expires on 31st December 1951. The Board, therefore, made the present inquiry.

2. (a) The claim of the grinding wheels industry to
Previous history. protection or assistance was first referred to
the Board for investigation in November, 1945. The Board, after due inquiry, submitted its Report in April, 1946 and, having held that the industry qualified for the grant of protection, made the following principal recommendations:-

- (1) No new licences for imports of grinding wheels and segments, oil stones, sharpening stones, etc. should be issued for the remainder of 1946;
- (2) A protective import duty of 80 per cent *ad valorem* should be levied on all articles covered by the category "grinding wheels and segments" for a period of 3 years; and
- (3) All Railway and Government orders for grinding wheels and segments should be placed with the Indian manufacturers up to the limit of their productive capacity.

In their Resolution No. 218-T(77)/48 dated 10th May, 1947, the Government of India, in the late Department of Commerce, accepted the recommendation (3) above. With regard to the other two recommendations, however, they held the view that, as the industry was not likely to survive even with as high an import duty as 80 per cent., it should be given direct protection and, therefore, decided as follows:-

- (1) All imports of grinding wheels should be prohibited throughout the financial year 1947-48, except for the qualities which could not be produced in India;
- (ii) A duty of 50 per cent should be imposed on the special qualities of grinding wheels which could not be produced in India; and
- (iii) A duty of 50 per cent should be imposed on the varieties manufactured in India when the import restrictions on grinding wheels were removed.

The protection granted to the industry was made subject to the following two conditions:

(1) Messrs. Grindwell Ltd., Bombay, and Messrs Kata Grinding Wheel Works, Amritsar, should take early steps to convert themselves into public limited companies.

(2) An agreement reported to have been arrived at between the foreign and the Indian shareholders in Messrs. Grindwell Ltd., whereby the former had agreed to transfer their shares to the latter, should be carried out at an early date.

(b) The restrictions on imports of grinding wheels continued till 4th December, 1948, when this article was placed on an Open General Licence. Although Government had originally decided that upon removal of import restrictions a duty of 50 per cent *ad valorem* only should be levied on the varieties of grinding wheels manufactured in India, they

reconsidered the matter and decided to impose, as previously recommended by the Board, a duty of 80 per cent *ad valorem* on all varieties of grinding wheels with effect from 4th December, 1948. The duty was to remain in force up to 31st December, 1950. The case again came up for review in 1949 upon representations made by Messrs. Grindwell Ltd. to the effect that the duty of 80 per cent was not adequate to protect the domestic industry. The Board investigated the matter and recommended that the duty should be increased to 100 per cent *ad valorem*. The Government of India, in the late Ministry of Commerce, in their Resolution No. 16(2)-TB/49 dated 11th May, 1949, accepted this recommendation and gave immediate effect to it by issuing a notification under Section 4(1) of the Indian Tariff Act, 1934. In 1950, the Board recommended to Government that this protective duty of 100 per cent *ad valorem*, which was due to expire on 31st December, 1950, should be extended by one year up to 31st December, 1951. The Government of India accepted this recommendation also by their Resolution No. 16(3)-TB/50 dated 9th December, 1950. Recently, under the Finance Act, 1951, a surcharge of 5 per cent has been imposed on the existing duty on grinding wheels and segments, bringing the total duty to 105 per cent *ad valorem*.

(c) As regards the two conditions imposed on this industry when it was first granted protection, Grindwells were able to fulfil the first of those conditions only last year, when they transferred their entire business as a going concern to a newly formed public limited company called Grindwell Abrasives Limited. The new company came into existence on 1st August, 1950, but it took over the assets of the former company as on 31st December, 1949. The assets were transferred at their written down value as on 31st December, 1949, but in consideration of the fact that their real value under present conditions was much higher, the new company agreed to issue to the vendor Company shares to the value of Rs. 12 lakhs, by way of goodwill. No information is available about Messrs. Kata

Grinding Wheel Works, Amritsar, and it is presumed that this firm has probably gone out of existence. As regards the second condition, the Government of India, by the late Ministry of Commerce letter No. 218-T(77)/46 dated 8th July 1948, agreed to allow each of the two Czechoslovakian experts of Messrs. Grindwell Ltd. to hold for the time being 16 per cent of the shares in that Company. The share capital to be issued by Messrs. Grindwell Abrasives Ltd. and its allocation have yet to receive the approval of the Government of India.

3. The existing scheme of protection includes all articles covered by the category "grinding wheels and segments". The Board, however, has received representations from several important consumers that the local industry is not able to meet the demand for certain types and sizes of grinding wheels to a satisfactory extent. We, therefore, discussed the subject at the public inquiry and also obtained from Messrs. Grindwell Abrasives, Ltd. detailed statistics of the particular types and sizes of grinding wheels actually supplied by them during the last 6 months. Our discussion revealed that, while the indigenous industry was capable of producing almost all the standard types and sizes in general demand, the manufacture of certain types and sizes was relatively less economical in the conditions of this country and resulted in a slowing down of the overall rate of production. Concentration on a limited range of varieties at the present stage would also help to bring down the costs of production of the domestic industry. It was, therefore, agreed, in consultation with the local manufacturer and the other interests present at the public inquiry, that the following types and sizes of grinding wheels should be excluded from the scheme of protection:-

- (1) Grinding wheels of any of the following specifications:

- (a) more than 21" diameter,

- (b) less than $1/8$ " or more than $7\frac{1}{2}$ " thickness, and
- (c) more than $12\frac{1}{2}$ " bore;

(ii) Diamond impregnated wheels; and

(iii) Thread grinding wheels.

Since grinding wheels commonly used in industry are made of synthetic abrasive grains only, natural grinding stones of any shape or size are also excluded from the scope of this inquiry. Grinding wheels having a finer grit than 280 are generally not made in India, but we are advised that it would be extremely difficult for the Customs authorities to verify the grit number by visual inspection and that it would prejudice the whole scheme of protection, if such wheels were excluded from the scope of the protective duty. Rubber-bonded wheels are also not manufactured in India, but since such wheels are likely to compete with bakelite-bonded wheels which are being manufactured, we have found it necessary to include them in the scope of protection.

4. On 12th July, 1951, the Board issued a press communique inviting firms, associations and persons interested in this inquiry, who desired that their views should be considered by the Board, to submit their representations. Detailed questionnaires were simultaneously issued to Messrs. Grindwell Abrasives, Ltd., to all the known importers and consumers of grinding wheels and to the various associations concerned. The Director of Industries, Bombay, and the Development Wing of the Ministry of Commerce and Industry, Government of India, were also requested to furnish detailed memoranda on this industry. Information regarding the c.i.f. prices and landed costs of grinding wheels was sought from the Collectors of Customs. A list of those to whom the Board's questionnaires were issued and from whom replies or memoranda were received is given in Appendix I. Shri R. Sundaram, Cost Accounts Officer attached to the Board, visited the factory of Messrs. Grindwell Abrasives, Ltd., at Uran, Bombay, on 13th

Method of
inquiry.

August, 1951 for collection of cost data. Dr.B.V. Narayana-swamy Naidu and Shri B.N. Adarkar, Members, and Shri M.A. Mulky, Secretary, visited the same factory on 13th November, 1951. A public inquiry was held at the Board's office in Bombay on 15th November, 1951. A list of those who attended the inquiry and gave evidence is given in Appendix II.

5. In the Board's first Report (1946) on this industry, Domestic demand. the domestic demand for grinding wheels was estimated at 300 to 350 tons per annum for three or four years from 1946. In making this estimate, the Board had made due allowance for the heavy stocks left with many of the engineering firms and workshops from their wartime purchases and for the difficulties then experienced in procuring plant and machinery from abroad. The Board considered that when these difficulties would be overcome, the demand for grinding wheels would increase to 450 to 600 tons per annum. The postwar transition is now over, but in the meanwhile, the industry has lost a part of its market on account of Partition. It is, therefore, necessary to make a fresh estimate of the domestic demand. From the figures given in paragraph 7 below, it will be seen that the average domestic production of grinding wheels during the three years ending 31st December, 1951, is likely to be 272 tons per annum. Statistics of imports of grinding wheels are available from the Director-General of Commercial Intelligence and Statistics, Calcutta, from September 1949 only and these are given below:-

1949-50 (September - March)	155.45 tons
1950-51 ..	208.65 tons
1951-52 (April - June)	40.95 tons

During the period September 1949 to June 1951, imports of grinding wheels were at an average rate of about 220 tons per annum. On the basis of these statistics of production and imports and allowing for the fact that the rate of imports had considerably slowed down during the first quarter of the current year, we think that the current

domestic demand for grinding wheels may be estimated at 450 to 500 tons per annum. This estimate was generally agreed to by the interests present at the public inquiry.

6. Grinding wheels are at present manufactured by only one unit, namely, Grindwell Abrasives, Ltd. At the time of the first inquiry into this industry held in 1946, the productive capacity of Grindwell Ltd. from which the present firm has taken over the business, was estimated at 250 tons per annum. Subsequently, Grindwell Ltd. made substantial additions to their productive equipment and the present capacity of the successor firm is estimated at 350 tons per annum. (For convenience of reference, we have hereafter used for the term "Grindwells" which means Grindwell Ltd. upto 1st August, 1950 and Grindwell Abrasives Ltd. thereafter.) We have received information about 2 other units, namely, Messrs. Krishna Lal Thirani, Calcutta, and Messrs. Diamond Grind-wheel Manufacturing Company, Bombay. Messrs. Krishna Lal Thirani, according to the information supplied by their representative at the public inquiry, have entered into an agreement with a German firm called Karl Kreh and Riedel for the manufacture of grinding wheels under the German trade mark "Kreh". The entire investment of Rs. 10 lakhs will be made by the Indian firm, the German firm providing the necessary technical assistance and assuming full responsibility for the quality of the product. The factory will be located at Calcutta and will have a capacity of 240 tons per annum. It is expected to go into production after about a year. In the initial stage, the firm expects to produce only straight wheels from 6" diameter upwards. The Diamond Grind-wheel Manufacturing Company is a private partnership firm with a capital of Rs. 1 lakh. We understand from the firm that its partners had a factory at Rajkot from 1943 to 1945 and were producing grinding wheels first under the name of Universal Grind-wheel Company and later under the name of Carbocorundum Co. Both these happened to be the names of well-known foreign manufacturers and had, therefore, to be abandoned. The factory was closed in 1945 owing to financial difficulties.

The same parties have now erected a factory at Navsari for the manufacture of grinding wheels. The factory will have a capacity of 125 tons per annum and is expected to go into production before the end of November, 1951. A special feature of this firm is that it will produce its own requirements of synthetic abrasive grains, instead of importing them from abroad. To start with, the firm will produce only grinding wheels up to 24" diameter from aluminium oxide for steel, but at a later stage it intends to take up the manufacture of grinding wheels from silicon carbide for high speed steel tools.

7. The domestic production of grinding wheels since 1948 has been as follows:-

Domestic production.	1948	200 tons
	1949	291.5 tons
	1950	223.7 tons
	1951 (January-July)	162.23 tons

The decline in production in 1950, as compared with the preceding year, has been explained by Grindwells as due to the depletion of stocks of imported raw materials, such as abrasive grains, resins (required for the manufacture of elastic bonded and high speed grinding wheels), dressing cutters and steel shots. During the first half of the current year also, production suffered because of an unavoidable delay in importing abrasive grains from the U.S.A. Grindwells have now secured an adequate supply of abrasive grains and expect to produce about 300 tons in all by the end of the year. Since the last inquiry (1949), the firm has started the manufacture of the following new types, namely, the special types of wheels required for the manufacture of razor blades, abrasive discs required by certain railway workshops, mounted points (small grinding wheels of different shapes fixed on steel spindles) and valve seat grinding wheels with steel bushes. The firm had produced some valve seat grinding wheels during the war for the Army, but has now begun to produce them for civilian consumption.

8. We have obtained from Grindwells particulars of the new equipment installed in their factory and the changes made in the layout of their plant since 1949. Some of the new equipment has added to the productive capacity of the firm, for example, electric-driven raw dressing machines and horizontal and diameter dressing machines for small wheels; while some has resulted in saving of labour, e.g., vibrating, sieving and grading machines, cranes for unloading goods at the Pier and oil pumping arrangements at the kilns and at the power house. A surface grinder has been installed to improve the quality of the products. Some of the old dressing machines have been re-designed to ensure better output and the design of the lathes in the dressing department has also been changed to make them dust-proof and thereby reduce the maintenance cost. A 132 h.p. Ruston engine with a 100 K.V.A. generator has been installed to increase the capacity of the power house. The firm has started its own foundry for making the various iron and aluminium castings required by it, thereby reducing its cost of production and avoiding the delays involved in getting such castings made outside. A cold storage room has been installed for storage of resins and other chemicals. In order to save internal transport, the dry rooms have been shifted near the kilns, the raw dressing machines near the dry rooms and the grain stores near the press department. The firm has plans to install the following additional equipment, namely, a tunnel kiln, the monorail system of internal transport and some more dressing machines. The first of these is of particular importance, because it will not merely result in a substantial reduction in cost, but will also shorten the process of production and thus speed up deliveries. The firm has informed us that it has not been able to carry out this improvement so far only because of lack of finance. The firm has applied to the Government of India for permission to issue additional shares to the extent of Rs. 20 lakhs and hopes that, if it can raise the necessary finance, either through an increase in its share

capital or otherwise, it would be able to install a tunnel kiln, in addition to carrying out other improvements, by the beginning of 1954. We think that the firm should take all possible steps to expedite the installation of a tunnel kiln.

9. (a) The evidence received by us leaves no doubt that so far as the standard varieties of grinding wheels are concerned the indigenous product is equal in quality to the imported product. Apart from one or two complaints mentioned below, Government Departments, Railways and a vast majority of other consumers have expressed satisfaction with the quality of the standard varieties of grinding wheels produced by Grindwells. In addition to the evidence received by us directly, Grindwells also have shown us a large collection of letters written to them by their customers to the effect that their wheels had given satisfactory performance. One of the defects commonly alleged by the consumers is the relatively shorter life of the indigenous grinding wheels. Grindwells have explained that the life of a wheel depends on its hardness, that is, the strength with which grains are held by the bond. They could produce a wheel which is hard enough to last much longer, but after a point, the increase in hardness will affect the cutting quality of the wheel. Within limits, a softer wheel releases the grain more easily and cuts better and hence the output per unit of time is higher. This complaint can, therefore, be removed if the consumers were to specify the correct degree of hardness required by them, after considering its possible effect on the output, in consultation with the manufacturers. Grindwells have shown us copies of correspondence relating to a case in which it was alleged that the indigenous wheel disintegrated too quickly, in the sense that the ratio between the reduction of the wheel and that of the product ground was much higher in the case of the indigenous wheel than in the case of foreign wheels. The correspondence showed that the allegation was based on unscientific tests and that when the correct tests were carried out, it was found that the ratio in question for

the indigenous wheel was lower than that for two well-known brands of foreign wheels and was only slightly higher than the ratio for one foreign brand. Another complaint made by consumers is that some of the wheels supplied by Grindwells suffer from a lack of balance. This is undoubtedly a manufacturing defect and Grindwells should take steps to remove it. Many of the other defects which have been alleged against the standard types of indigenous wheels have been found on examination to be due either to an incorrect choice of wheel by the customer or its use at an incorrect speed. In order to obtain satisfactory performance, it is necessary that the correct type of wheel should be chosen for each job and that it should be worked at the correct speed. We understand from Grindwells that they have always been willing to give, and have in fact been giving, technical advice to their customers on any problem relating to the selection and use of grinding wheels. We feel that, with continued co-operation between the manufacturers and the consumers, many of the difficulties now experienced by the consumers in regard to the use of indigenous grinding wheels can be removed.

(b) With regard to certain special types of grinding wheels, however, such as, wheels over 21" diameter or less than 1/8" thickness, thread grinding wheels, wheels required for the buffing machines used in the textile industry, certain mounted points used for the manufacture of metal boxes or certain types of wheels used for the manufacture of razor blades, we find that the complaints made by the consumers about the quality of wheels produced by Grindwells are not without justification. In their desire to meet the domestic demand to a fuller extent and also to secure a fuller utilization of their capacity, Grindwells have in the past experimented in the production of a large variety of special wheels required by their customers, but the experiments have not always been completely successful. As stated in paragraph 3 above, they now propose to eliminate some of these types, but with regard to the rest, such as

wheels or mounted points required by the manufacturers of razor blades and metal boxes, they are confident, with some further effort on their part and some more co-operation from the consumers, of being able to turn out products which will fully meet the requirements of the latter.

(c) We understand that the Indian Standards Institution has prepared draft standard specifications for grinding wheels and has circulated them for comments. When the standard specifications are finalised, a further important step will have been taken towards improving the quality of the indigenous product.

10. We have received complaints from several dealers and consumers that the delivery dates quoted by Grindwells are unduly long. So far as Government Departments are concerned, Grindwells have been able to effect deliveries within a reasonable period and have rendered special assistance in emergencies. In the case of other consumers, however, complaints about delays in deliveries seem to be amply justified. The evidence received by us shows that in some cases, deliveries were delayed by as long as 8 to 12 months. The firm has explained the delays in the past as due to circumstances beyond its control, such as the delay in the receipt of import licences for raw materials and in securing railway bookings. The complaints are, however, far too frequent to be fully explained by such special circumstances. We, therefore, recommend that Grindwells should take all possible steps to expedite their deliveries. We understand that, as a rule, Grindwells produce only against orders. This is unavoidable to a large extent, since there are numerous varieties of grinding wheels and it is extremely difficult to anticipate the probable demand for individual varieties. The machines for which grinding wheels are used are obtained from various sources, such as, the United Kingdom, the United States, Germany, Japan, Czechoslovakia, etc. and different machines require grinding wheels

of different specifications. However, a large number of consumers have been buying their grinding wheels from Grindwells regularly for the past few years and Grindwells could by now be expected to be fairly familiar with the requirements of such consumers, and indeed with the requirements of the domestic market in general. We recommend that Grindwells should endeavour to maintain reasonable stocks of the varieties of grinding wheels which are in general demand and of those normally required by their regular customers.

11. (a) Imports of grinding wheels and segments were included in Open General Licence XI from 4th December, 1948 to 5th May, 1949. The O.G.L. was cancelled on the latter date and thereafter till the end of 1949 import licences were granted only to the extent required to cover firm commitments entered into before the cancellation of the O.G.L. During January-June, 1950, imports of grinding wheels were licensed from soft currency sources only, subject to a monetary ceiling. During the following licensing period also, grinding wheels were allowed to be imported only from soft currency sources and licences were issued to established importers up to 25 per cent of one half of their best year's imports. The same policy was continued during the licensing period, January-June, 1951. On 13th March, 1951, it was announced that the licences granted for the period, January-June, 1951 would be doubled in value and that the period of validity of such licences extended by 6 months. During the current licensing period, July-December, 1951, import licences for grinding wheels are to be issued to established importers, for soft currency sources only, up to 25 per cent of one half of their best year's imports.

(b) Grindwells have asked for a total ban on imports of grinding wheels up to 21" diameter. One of the reasons put forward by them is that there is still considerable prejudice on the part of consumers against the indigenous product. The evidence before us shows that Grindwells have

already earned a good reputation for the quality of the standard types produced by them and there is no longer the same prejudice against their products as before. Even so, import control is likely to help the development of this industry for another reason, though, in our view, a total ban on varieties up to 21" diameter will hardly be justified. As stated earlier, one way by which the industry can bring down its costs of production is by concentrating its efforts on a smaller range of products than at present and in order to enable it to do so, it is necessary that there should be an adequate demand for the range of products manufactured by it. We, therefore, recommend that in addition to limiting the aggregate quantum of imports to the amount required to bridge the gap between domestic demand and production, preference should be given to imports of those types of grinding wheels and segments which the domestic industry does not propose to produce for the time being (See paragraphs 3 and 9 above).

12. (a) The cost of production of grinding wheels at the factory of Messrs. Grindwell Abrasives Ltd. has been examined by the Cost Accounts Officer attached to the Board. The Company produces numerous varieties of grinding wheels and segments, grinding stones and sticks and abrasive compounds. This makes it virtually impossible to determine the cost of production of each individual product by shape or size. It is the general practice in this trade, in India as well as in foreign countries, to fix the prices of individual varieties by making additions to or deductions from the prices specified in an international basic price table which has been adopted by manufacturers all over the world. The discounts or premia vary from one manufacturer to another and varying discounts or premia are quoted for different types or size ranges. For the purpose of a rough and ready comparison of prices with the costs of production, the usual practice is to estimate the cost of a representative

Board's estimate of
cost of production
and fair selling
price.

size, say, 12" x 1" or 12" x 2" of a plain wheel by multiplying its weight in pounds by the overall average cost per pound (i.e., the total cost of production divided by the total output in lbs.) and to compare it with the price quoted for that size on the basis of the international table; the assumption being that the size selected is so representative of the total production of the firm that its actual cost would approximately correspond to the overall average cost. In fact, the actual cost varies according to sizes, the cost per pound may increase as the size is reduced, owing, for example, to the higher cost of dressing and overheads (as is readily seen from the international price table, where the price per pound works out much higher for certain smaller sizes than for bigger sizes). It is, therefore, not possible to determine the cost of production of any particular size by multiplying its weight by the overall average cost per pound, except in the case of a size which is representative, in the sense just explained, of the total production. At the previous inquiries, three sizes, 10" x 1", 12" x 1" and 12" x 2" were taken as representative and their fair selling prices were determined by multiplying their respective weights by the overall average cost per pound. In other words, it was assumed that the actual cost per pound of these sizes was approximately the same as the overall average cost per pound. We have gone into this matter afresh and have obtained from the firm detailed statistics of its production of different sizes and shapes. We are satisfied that 10" x 1", 12" x 1" and 12" x 2" are the most representative sizes. Accordingly, we have first determined the overall average cost per pound and have worked out the fair selling prices of the three sizes of wheels by multiplying their respective weights by the overall average cost per pound. We have then considered what quantum of protection would be needed by the domestic industry on the basis of a comparison of the fair selling prices, so determined, with the corresponding c.i.f. prices. As a further check on this procedure, we have tried to estimate the value of the firm's actual production

of the principal varieties of electrundum wheels during the period from April to September, 1951, at prices equal to the current c.i.f. price of those varieties and have ascertained the margin by which the average value so worked out would fall short of the firm's overall average cost as determined by us. This alternative calculation is intended to minimise any possible error involved in relying on figures for three sizes only. We have taken into account the results of both the calculations in arriving at our final conclusions regarding the quantum of protection needed by the domestic industry.

(b) The Cost Accounts Officer has worked out the overall cost of production of grinding wheels at the Grindwells factory during 1949, 1950 and 1951 and has also estimated the cost for 1952. The latter is based on the assumption that the firm would utilise its full productive capacity of 360 tons in 1952. The cost of production of the indigenous product has been estimated up to the f.o.r. Bombay stage, so as to correspond to the landed cost of the imported product. We have scrutinised the various elements of costs with a view to assessing the progress made by the industry since the grant of protection and the difficulties encountered by it in reducing its cost of production. An important fact revealed by our examination is that the costs of production would be appreciably reduced if the firm were to concentrate on a smaller range of varieties than at present. The firm appreciates this point and has promised to rationalise its pattern of production in future with this end in view. The other points arising out of the cost investigation are briefly explained below:-

(1) *Raw materials*: The principal raw materials used for the manufacture of grinding wheels are abrasive grains, bond and clay. The consumption of these materials per lb. of the finished product was 1.61 lbs. in 1951. In estimating the future costs, however, we have adopted a ratio of 1.42 lbs. of materials to one lb. of the finished product,

which in the light of past experience we regard as reasonable. There has been a considerable rise in the prices of materials since 1949, as may be seen from the figures given below:-

(Prices per lb.)

	1945			1948			1951		
	Rs.	As.	Ps.	Rs.	As.	Ps.	Rs.	As.	Ps.
Aluminium Oxide	0	5	0	0	6	0	0	8	8
White Lionite	0	9	0	0	9	0	0	13	8
Silicon carbide	0	7	0	0	8	5	0	13	7
Green carbonate	0	7	0	0	7	0	0	13	7

(2) *Power & fuel*: Since 1949 when the costs of production of this firm were last investigated, there has been some increase in the expenditure under this item owing to a rise in fuel prices. The price of furnace oil has risen from Rs. 82-15-0 per ton in 1949 to Rs. 121-12-0 in 1951 and that of Diesel Oil from Rs. 29-0-8 per barrel of 40 gallons in 1949 to Rs. 36-0-0 in 1951.

(3) *Labour & establishment*: The total number of workers employed by the firm was 425 in 1948, 462 in 1949, 494 in 1950 and 473 in 1951. The increase of approximately 9 per cent in 1949 as compared with 1948 was due to the increase in the output of the firm from 200 tons in 1948 to 300 tons in 1949; the output in 1951 is also expected to be about 300 tons. The firm admits that there is scope for economy in labour, but has been explained that it has so far found it difficult to achieve it because of the general "go-slow" policy on the part of workers. In the dressing department, for example, the present output is only 30 wheels per man-day on the basis of an eight-hour day, as compared with the former output of 50 wheels per man-day on the basis of a nine-hour day. The firm has assured us that it would continue to strive for greater economy through the introduction of labour-saving devices. A statement in Appendix III gives details of the staff employed by the firm from 1945 to

1951, as well as its labour force from 1948 to 1951. Here also, it will be seen that the technical staff has increased from 78 in 1948 to 116 in 1951. The firm has found it necessary to engage a larger number of supervisors in each department, in order to ensure better and quicker output and to maintain quality. We think that the increase in the technical staff is generally justified by the results, but that a further addition to the staff will not be necessary until a substantial increase takes place in the productive capacity of the firm. Due allowance has been made for the additional expenditure to be incurred by the firm under the provisions of the recent Employee's Provident Funds Ordinance, 1951.

(4) *Interest on working capital:* Past experience has shown that in order to ensure continuity of production it is necessary for the firm to hold stocks of materials to the extent of its six months' requirements. The firm has also assured us that it will maintain larger stocks of finished goods in future. We have, therefore, reckoned its working capital requirements as equal to its cost of production for six months, as against three months allowed on the previous occasions. In view of the increase in the bank rate by one half per cent, we have allowed interest on the working capital at $4\frac{1}{2}$ per cent per annum as against 4 per cent per annum previously allowed.

(5) *Depreciation:* Depreciation has been calculated at the income tax rates on the written down value of the assets. For the reasons given in the following sub-paragraph, we have not agreed to the firm's request to include an annual allowance for writing off the "goodwill" payment to be made to the old company "Grindwell Ltd."

(6) *Return on block:* Grindwell Abrasives Ltd. are going to have a paid-up share capital of Rs.14,23,200 which includes a sum of about Rs. 12 lakhs to be paid by way of "goodwill" to the vendor company "Grindwell Ltd.". Grindwell Abrasives Ltd. have claimed a return of 10 per cent per annum on this

capital. We have disallowed this claim. The share capital to be issued by this firm has not yet received the approval of Government and in any case it is the normal practice of the Board to allow a return on the gross block only and not on share capital. We have taken the value of the gross block at Rs. 7,21,621 as it stood in the books of the vendor company and allowed a return of 10 per cent on this amount.

(c) The average fair selling price, f.o.r. Bombay, per lb. of grinding wheels, calculated on the above basis, comes to Rs. 2-7-9. This approximately is the same as the estimate made by the Board for 1949 which was Rs. 2-7-11. The firm desires the details of its costs of production to be kept confidential and hence such details are being forwarded to Government in a separate enclosure to this Report and only the totals under the main heads are given in the following table:

The Board's estimate of the cost of production and fair selling price f.o.r. Bombay per lb. of grinding wheels in 1952.

	Cost per lb.
1. Raw materials	0.856
2. Conversion charges	1.346
3. Packing charges	0.140
4. Total	2.342
5. Interest on working capital @ 4½% on six months' cost of production	0.053
6. Total of cost of production	2.395
7. Return on block at 10%	0.089
8. Fair selling price	2.484
	<u>Rs. 2-7-9</u>

On the basis of this estimate the fair selling prices for the three sizes 10" x 1", 12" x 1" and 12" x 2" selected by us as representative, work out as follows:-

Sizes	Weight in lbs. per wheel.	Fair selling price as now estimated (Weight in lbs. multiplied by Rs. 2-7-9)	Fair selling price as esti- mated in 1949 (Weight in lbs. multiplied by Rs. 2-7-11).
		Rs. As. Ps.	Rs. As. Ps.
10" x 1"	6.80	16 14 3	15 15 5
12" x 1"	9.70	24 1 6	24 3 2
12" x 2"	19.00	47 3 2	47 6 5

13. A statement in Appendix IV gives the data regarding the c.i.f. prices and landed costs of imported grinding wheels as reported by the Collectors of Customs and some of the leading importing firms. At the public inquiry, the representatives of Messrs. William Jacks & Co. and Messrs. H.S. Cox & Co. informed us that the manufacturers in the United Kingdom had put up their prices by roughly 12½ per cent for all orders booked after May 1951. According to the former firm, the revised c.i.f. prices for Aloxit and Carborundum wheels are to be calculated from their list prices (which are approximately the same as those given in the International Price Table adopted by manufacturers in all countries) by applying the following conversion factors.

Size	Aloxite 1 s.=	Carborundum 1 s.=
Dia. 3½" or less	Rs. 0 6 4	Rs. 0 7 2
" over 3½" upto 10"	" 0 7 0	" 0 8 1
" over 10"	" 0 7 4	" 0 8 5

The prices reported by Messrs. H.S. Cox & Co. are approximately the same. The current c.i.f. prices and landed costs of the three representatives sizes, 10" x 1", 12" x 1" and

12" x 2", obtained by applying the conversion factors for Aloxite wheels as reported by Messrs. William Jacks and Co. to the list prices of those sizes are as follows:-

	10" x 1"			12" x 1"			12" x 2"		
	Rs.	As.	Ps.	Rs.	As.	Ps.	Rs.	As.	Ps.
C.i.f. prices	12	4	0	16	8	0	28	6	8
Clearing charges	0	3	11	0	5	3	0	9	1
Customs duty @ 105%	12	13	10	17	5	2	29	13	5
Landed cost with duty.	25	5	9	34	2	5	58	13	2
Landed cost without duty.	12	7	11	16	13	3	28	15	9

14. (a) In the table given below, the fair selling prices of 10" x 1", 12" x 1" and 12" x 2" grinding wheels produced by Grindwells, as estimated by us in paragraph 12 above, are compared with the landed costs without duty of the corresponding sizes of grinding wheels as worked out in paragraph 13 above.

	10 x 1"			12" x 1"			12" x 2"		
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
1. Fair Selling prices.	16	14	3	24	1	6	47	3	2
2. C.i.f. prices	12	4	0	16	8	0	28	6	9
3. Landed costs without duty.	12	7	11	16	13	3	28	15	9
4. Difference between 1 and 3.	4	6	4	7	4	3	18	3	5
5. Difference as percentage of c.i.f. price.	35.88			44.03			64.09		

From the above figures it would appear that the rates of duty required to protect the three sizes are 36 per cent, 44 per cent, and 64 per cent respectively. According to the production data supplied by Grindwells for the period from April to September, 1951, the three sizes represent 2.76 per cent, 14.81 per cent and 6.87 per cent, respectively of the total production of grinding wheels during that period. If the rates of duty indicated above for the three sizes are weighted in the proportion of 2.76: 14.81:6.87, the average rate of duty would come to 48.75 per cent.

(b) As stated in paragraph 12(a) above, we have also estimated the value of the firm's actual production of the principal categories of electrundum wheels during April-September, 1951, at prices equal to the current c.i.f. prices of such varieties. For this purpose, we have taken into account the production data supplied by the firm for all varieties of electrundum wheels, the production of each of which exceeded 200 lbs. The production of the selected categories during April-September, 1951 amounted to 1,71,106 lbs. or 52.6 per cent of the total production of grinding wheels during that period and its value at the current c.i.f. prices comes to Rs. 2,81,925, the average value of the production of the selected categories at current c.i.f. prices works out to Rs. 1.648 per lb. Comparing this with the overall average cost of Rs. 2.484 per lb. as determined by us in paragraph 12(c) above, the quantum of protection indicated by this alternative procedure comes to 48.73 per cent, as against 48.75 per cent indicated by the figures given in the preceding sub-paragraph.

(c) From the data given above, it is clear that the grinding wheels industry still needs protection against foreign competition. The quantum of protection needed is, however, much smaller than before and taking into account the results of the alternative calculations given above and also allowing for some further increase in efficiency, we recommend that the protective duty on grinding wheels and

segments of all kinds, other than those which, as stated in paragraph 3, are to be excluded from the scheme of protection, should be reduced from the existing rate of 105 per cent *ad valorem* to 47½ per cent *ad valorem*, excluding surcharge, or 50 per cent *ad valorem* including surcharge. We recommend, further, that the industry should continue to receive protection for a further period of three years from 31st December, 1951, but that, in view of the uncertainty regarding the future trend of import prices and the changes contemplated by the firm in its pattern of production, the quantum of protection should be reviewed towards the end of 1953. The varieties of grinding wheels which are to be excluded from the scheme of protection should be subject to the general revenue duty of 31½ per cent *ad valorem*. A lower rate of duty than 31½ per cent may create an incentive for some unscrupulous persons to try to pass off some of the included varieties as excluded ones for the purpose of the customs duty and thus add to the difficulties of customs administration.

15. If the recommendation in paragraph 14(c) above is accepted, Item 71(8) of the First Schedule to changes in the Tariff Schedule. the Indian Customs Tariff may be amended to read as follows:-

Item No.	Name of the article.	Nature of duty.	Standard rate of duty.	Preferential rate of duty if the article is the produce or manufacture of			Duration of protective rate of duty.
				U.K.	A British colony.	Burma	
71(8)	Grinding wheels and segments made of synthetic abrasive grains, excluding the following, namely, (i) grinding wheels having (a) more than 21" diameter, or (b) more than 7½" or less than 1/8" thickness or (c) more than 12½" bore; (ii) diamond-impregnated wheels; and (iii) thread grinding wheels.	Protective	50 per cent <i>ad valorem.</i>	-	-	-	December, 31st, 1954.
71(12)	Grinding wheels made of synthetic abrasives grains, not otherwise specified.	Revenue	31½ per cent <i>ad valorem.</i>	-	-	-	



16. We understand from the Director ~~General of Supplies~~ Government and Disposals that in accordance with the Board's patronage recommendation, Government orders for all varieties of grinding wheels and segments which can be manufactured locally are being placed with the domestic industry since March 1949. This policy has worked satisfactorily and has been of immense benefit to the domestic industry in consolidating its position. We accordingly recommend that the same policy be continued in future.

17. Grindwells are at present entirely dependent on Manufacture of abrasive grains. imports for one of their essential raw materials, namely, synthetic abrasive grains. In 1948, when the first inquiry into this industry was held, while this firm was using imported grain exclusively, another firm called the Kata Grinding Wheel Works, Amritsar, was manufacturing its own grain from corundum available in the Rewa State. After considerable research, for which the Punjab Government had given financial and technical help, Katas had evolved a technique which was specially suited to the indigenous material. This firm, however, is no longer in existence and, moreover, the material used by it was suitable only for certain simpler types of wheels. In its first Report on this industry, therefore, the Board recommended that Grindwells, which had then been allowed to import their requirements of synthetic abrasive grains free of duty up to the end of 1947 only, should continue to enjoy that concession for the period of protection. Government accepted this recommendation. In 1949, in its Report on a review of the protection granted to this industry, the Board reaffirmed the same recommendation. On that occasion, however, Government decided to extend the concession up to 31st December, 1950 only, stating that the firm should make arrangements to manufacture this article locally by that date. On further representations from the firm, the concession has been extended up to 31st December, 1951 and the Board has been requested to examine the desirability of granting any further extension beyond that date. India has

plentiful resources of bauxite and other materials required for the manufacture of synthetic abrasive grains and it is, therefore, desirable that this industry should be established in the country at an early date. Grindwells, however, have informed us that while they have by no means abandoned the idea of manufacturing synthetic abrasive grains, they do not consider the present situation to be favourable for undertaking this project. Apart from the difficulty of raising the necessary finance, cheap electric power, which is an essential requisite, is not likely to be available until one of the bigger hydro-electric projects is completed. The present demand for synthetic abrasive grains in the country is also considered to be too small to make the project economical. Mr. Kregczy, a representative of Messrs. Krishna Lal Thirani, stated at the public inquiry that in foreign countries synthetic grains were manufactured in electric furnaces in big blocks and that usually only half of the blocks turned out to be of a sufficiently high grade to be suitable for the manufacture of grinding wheels, the rest of the material being sold for ordinary uses, such as polishing of floors. The market for low grade grain was yet to be developed in this country and this was an additional reason why the manufacture of synthetic abrasive grains would not be economical under present conditions. We understood at the public inquiry that the Punjab Government were exploring the possibility of manufacturing synthetic abrasive grain with the hydro-electric power which would be available from the Bhakra-Nangal project, and that quotations for the necessary machinery had been called for from one of the importing firms in Bombay. We have received no further information about this project. A representative of the Diamond Grindwheel Mfg. Co., however, informed us at the public inquiry that his firm had already started the manufacture of synthetic abrasive grains by using aluminium oxide and hard coke, and he produced two samples of 90 and 100 mesh grain manufactured by his firm. In a written communication to the Board, the firm states that although

the quality of its abrasive grains "may not be up to the specifications of foreign manufacturers" at present, the firm is fully confident of being able to manufacture a product of standard quality within one year from now. The other two manufacturers, however, are firmly of the opinion that this material cannot be produced except by the use of electricity. We do not think that we can disregard this opinion at this stage relying on the limited experience of only one firm. If cheap electric power is one of the essential conditions for the successful manufacture of synthetic abrasive grains, it is doubtful whether this condition will be fulfilled during the next two years. We are also of the view that until the manufacture of this material is established in the country, it would not be desirable to levy a customs duty on its imports, as this will only increase the cost of grinding wheels to the final consumer who is already paying much more than the normal cost of this essential article of general industrial use. At the same time, we think that it would be advisable to provide for a review of the whole position after about a year in the light of any progress which the Diamond Grindwheel Mfg. Co. may have made by that time in producing synthetic abrasive grains. We, therefore, recommend that the concession hitherto granted to Grindwells to import synthetic abrasive grains free of duty be continued up to 31st December, 1952 and that it should be extended to the new unit to be established by Messrs. Krishna Lal Thirani, if it comes into production before that date.

18. Our main conclusions and recommendations may be summarised as under:-

Summary of
conclusions
and recom-
mendations.

(1) The following types and sizes of grinding wheels should be excluded from the scheme of protection:

(1) Grinding wheels having (a) more than 21" diameter or (b) less than 1/8" or more than 7½" thickness or (c) more than 12½" bore;

- (ii) Diamond-impregnated wheels;
 - (iii) Thread grinding wheels; and
 - (iv) Natural grinding stones of any shape or size.
- [Paragraph 3]

(2) The domestic demand for grinding wheels is estimated at 450 to 500 tons per annum. [Paragraph 5]

(3) The rated capacity of Messrs. Grindwell Abrasives, Ltd. is estimated at 360 tons per annum. In addition, 2 other units, with a total capacity of 365 tons per annum, are going to start production of grinding wheels in the near future. [Paragraph 6]

(4) The domestic production of grinding wheels amounted to 200 tons in 1948, 291.5 tons in 1949, 223.7 tons in 1950 and 162.23 tons from January to July, 1951. [Paragraph 7]

(5) So far as the standard varieties of grinding wheels are concerned, the quality of the indigenous product has been found quite satisfactory. [Paragraph 9(a)]

(6) Grindwells should take all possible steps to expedite their deliveries and should also endeavour to maintain reasonable stocks of the varieties of grinding wheels which are in general demand and of those normally required by their regular customers. [Paragraph 10]

(7) In addition to limiting the aggregate quantum of imports to the amount required to bridge the gap between domestic demand and production, preference should be given to imports of those types of grinding wheels and segments which the domestic industry does not propose to produce for the time being. [Paragraph 11(b)]

(8) The fair selling price, f.o.r. Bombay, per pound of grinding wheels in 1952 is estimated at Rs. 2-7-9. [Paragraph 12(c)]

(9) The protective duty on grinding wheels and segments of all kinds, other than those which are to be excluded from

the scheme of protection, should be reduced from the existing rate of 105 per cent *ad valorem*, including surcharge to 47½ per cent *ad valorem* excluding surcharge or 50 per cent *ad valorem*, including surcharge. [Paragraph 14(c)]

(10) The industry should continue to receive protection for a further period of 3 years from 31st December, 1951, but in view of the uncertainty regarding the future trend of import prices and the changes contemplated by the firm in its pattern of production, the quantum of protection should be reviewed towards the end of 1953. [Paragraph 14(c)]

(11) The varieties of grinding wheels which are to be excluded from the scheme of protection should be subject to a revenue duty of 31¼% *ad valorem*. [Paragraph 14(c)]

(12) The existing policy of placing all Government orders with the domestic industry for the varieties of grinding wheels and segments which can be manufactured locally should be continued. [Paragraph 16]

(13) The concession hitherto granted to Grindwells to import synthetic abrasive grains free of duty should be continued up to 31st December, 1952 and extended to the new unit to be established by Messrs. Krishna Lal Thirani, if it comes into production before that date. [Paragraph 17]

19. Messrs. Grindwell Abrasives, Ltd. have readily
 Acknowledged- supplied us with all the information regarding
 ments. their unit which was required by us for carrying out this investigation. Our thanks are due to them as also to Messrs. Krishna Lal Thirani, Messrs. Diamond Grind-Wheel Manufacturing Company and the representatives of importers and consumers for their co-operation in this matter. We also wish to acknowledge the assistance received from Shri P.L.Sahgal, Deputy Development Officer(Tools), Ministry

of Commerce and Industry, Government of India, and Shri R. Sundaram, Cost Accounts Officer attached to the Board.

B.V. NARAYANASWAMY,

Member.

B.N. ADARKAR,

Member.

M.A. MULKY,

Secretary.

Bombay,

Dated the 5th December, 1951.



APPENDIX I

(See paragraph 4)

LIST OF PERSONS OR BODIES TO WHOM THE BOARD'S QUESTIONNAIRES
WERE ISSUED AND FROM WHOM REPLIES OR MEMORANDA WERE RECEIVED

(*) Indicates those who have sent detailed replies to the
questionnaire or sent memoranda.

A. PRODUCERS:

1. *M/s. Diamond Grindwheel Manufacturing Company,
19, Bombay Mutual Annexe, Gunbow Street,
Bombay.
2. *M/s. Grindwell Abrasives Limited,
Karim Chambers, 40, Hamam Street,
P.O. Box No. 79, Fort, Bombay.

B. IMPORTERS:

1. *M/s. Alfred Herbert (India) Ltd.,
13/3, Strand Road, Calcutta.
2. M/s. Batliboi and Company,
Nagdevi Street, Bombay.
3. M/s. Burn and Co. Ltd.,
12, Mission Row,
Calcutta.
4. *M/s. Guy Ward and Company,
Mustafa Building, Sir P.M. Road,
Bombay.
5. M/s. G. Vithaldas and Company,
Nagdevi Street, Bombay.
6. *M/s. Heatly and Gresham Limited,
Post Box 225, Forbes Street, Bombay.
7. *M/s. Hiralal Gokaldas Dalal,
Nagdevi Street, Bombay.
8. *M/s. H.S. Cox and Company,
24, Rampart Row, Bombay.

B. IMPORTERS: (Contd.)

9. M/s. Jessop and Company Limited,
6, Netaji Subhas Road, Calcutta.
10. *M/s. Machine Tools (India) Ltd.,
Imperial Chambers, Wilson Road,
Ballard Estate, Post Box No. 522,
Bombay 1.
11. M/s. Manubhai Sons and Company,
15, Old Custom House Road, Bombay 1.
12. *M/s. Martin Burn Limited,
12, Mission Row, Calcutta.
13. *M/s. Somnath and Co.,
94, Lohar Street, Bombay 2.
14. *M/s. Rallis (India) Limited,
21, Raveline Street, Fort, Bombay.
15. *M/s. Roberts, McLean and Co. Ltd.,
Ilaco House, Sir P.M. Road, Bombay 1.
16. *M/s. Scott and Pickstock,
2, Clive Ghat Street, Calcutta.
17. *M/s. William Jacks and Company,
10, Clive Street, Calcutta.
18. *M/s. Hakimji Lookmanji,
C.P. Tank Road, Bombay 1.

C. CONSUMERS:

1. *M/s. Bhartiya Electric Steel Co. Ltd.,
42, Shibtalla Street, Calcutta.
2. *M/s. The Binani Metal Works Ltd.,
Binani Buildings, 38, Strand Road,
Calcutta 1.
3. *M/s. The Bombay Dyeing and Manufacturing Company
Limited, Neville House, Ballard Estate,
Bombay 1.
4. *M/s. Bombay Tool Supplying Agency,
50, Nagdevi Cross Road, Bombay 3.
5. * The Controller of Stores,
B.B. & C.I. Railway (Western),
Mahalaxmi, Bombay.

C. CONSUMERS: (Contd.)

6. * The Controller of Stores,
G.I.P. Railway, (Central)
Bombay.
7. *M/s. Cooper Engineering Ltd.,
Satara Road, District Satara.
8. *M/s. Godrej Safes, Safe-deposits and Boyce
Manufacturing Co. Ltd., Lalbaug, Parel,
Bombay.
9. * The Engineering Association of India,
23-B, Netaji Subhas Road, Calcutta.
10. M/s. Guest, Keen, Williams Ltd.,
Das Chambers, Dalal Street, Fort, Bombay.
11. *M/s. Hind Razor and Blade Co. Ltd.,
Industrial Assurance Building,
Opp. Churchgate Station, Bombay.
12. * Indian Jute Mills' Association,
Royal Exchange, Post Box No. 280,
Calcutta 1.
13. * The Indian Tool Manufacturers Ltd.,
101, Sion Road, Bombay 22.
14. *M/s. Kantilal Bhogilal & Co.,
68, Nagdevi Cross Lane, Bombay.
15. *M/s. Kumardhubi Engineering Works Ltd.,
Kumardhubi P.O., District Manbhum.
16. *M/s. Mazagaon Dock Ltd.,
Bombay.
17. *M/s. Metal Box Company of India Ltd.,
249, Worli Road, Worli, Bombay 18.
18. *M/s. Metal Box Company of India Ltd.,
Post Box No. 2123, Kiderpore, Calcutta,
19. * The Railway Board (Rly. Liaison Officer),
Block No. 1, Shahjehan Road, New Delhi.
20. M/s. Richardson & Cruddas Ltd.,
Byculla Iron Works, Bombay 8.
21. M/s. Shaw Wallace and Company,
4, Bankshall Street, Calcutta.

C. CONSUMERS: (Concld.)

22. *M/s. Tata Iron and Steel Co.,
Bombay House,
24, Bruce Street, Fort, Bombay.

D. ASSOCIATIONS:

1. The Associated Chambers of Commerce of India,
Royal Exchange, Calcutta.
2. The Bombay Chambers of Commerce,
Mackinnon Mackenzie Building, Ballard Estate,
Bombay.
3. *The Calcutta Import Trade Association,
Royal Exchange, Post Box No. 280, Calcutta.

E. GOVERNMENT DEPARTMENTS:

1. *Ministry of Commerce and Industry (Development Wing),
New Delhi.
2. *The Director of Industries,
Bombay.



APPENDIX II

(See paragraph 4)

LIST OF PERSONS WHO ATTENDED THE BOARD'S PUBLIC
INQUIRY ON THURSDAY, THE 15TH NOVEMBER, 1951.

PRODUCERS:

1. Mr. P. H. Sidhwa	}	Representing	M/s. Grindwell Abrasives Ltd. Karim Chambers, 40, Hamam Street, P.O.Box No. 78, Fort, Bombay.
2. Mr. F. B. Iima			
3. Mr. E. J. Kaufman-Kavan			
4. Mr. N. D. Sidhwa			
5. Mr. B. L. Arukia	}	"	M/s. Krishna Lal Thirani & Co., 8, Royal Exchange Place, Calcutta.
6. Mr. T. H. Kregczy			
7. Mr. V. S. Patel	"	"	M/s. Diamond Grindwheel Mfg. Co., 18, Bombay Mutual Annexe, Gunbow Street, Bombay 1.

IMPORTERS:

8. Mr. Gopal	}	"	M/s. Guy Ward & Co. Ltd., Fourth Floor, Mustafa Building, Sir P.M. Road, P.O.Box 339, Bombay; & M/s. Scott & Pickstock, 2, Clive Ghat Street, Calcutta.
9. Mr. L. W. Leaf			
10. Mr. B. C. Achar		"	M/s. William Jacks & Co., 10, Clive Street, Calcutta.
11. Mr. K. C. Boomla		"	M/s. H. S. Cox & Co., 24, Rampart Row, Bombay.
12. Mr. B. N. Sthalekar		"	M/s. Heatly & Gresham Ltd., P.B. 225, 9, Forbes Street, Bombay.

IMPORTERS:

13. Mr. I. McIntosh	}	Representing	M/s. Roberts McLean & Co. Ltd., Ilaco House, Sir P.M.Road, Bombay.
14. Mr. R. C. Atterton			
15. Mr. K. B. Sethna	"	"	M/s. Martin Burn Ltd., 12, Mission Row, Calcutta.
16. Mr. D. L. Rao	"	"	M/s. Rallis (India) Ltd., 21, Raveline Street, Fort, Bombay.
17. Mr. V. R. V. Easwar	"	"	M/s. Hakimji Lookmanji, C.P. Tank Road, Bombay.

CONSUMERS:

18. Mr. F. J. Vachha	"	The Controller of Stores, Western Railway, Mahaluxm: Bombay.
19. Mr. J. C. Fernandes	"	The Controller of Stores, Central Railway, Parel, Bombay.
20. Mr. Mariano de Mello	"	The Engineering Association of India, 23-B, Netaji Subhas Road, Calcutta.
21. Mr. W. J. Conry-Halley	"	The Metal Box Co. of India Ltd., 249, Worli Road, Worli, Bombay.
22. Mr. K. G. Kale	"	M/s. Hind Razor & Blade Co. Ltd.; Industrial Assurance Building, Opp. Churchgate Station, Bombay.
23. Mr. M. A. Bharucha	"	M/s. Altex Limited, 147, Esplanade Road, Bombay.
24. Mr. P. Daver	"	M/s. Garlick & Co. Ltd., Haines Road, Jacob Circle, Bombay.

CONSUMERS:

25. Mr. Krempel	Representing	M/s. Laxmi Rattan Engineering Works Ltd., Ferguson Road, Lower Parel, Bombay.
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GOVERNMENT OFFICIALS:

26. Mr. P. L. Sahgal	Industrial Adviser (Engineering), Ministry of Commerce & Industry (Develop- ment Wing), Shahjahan Road, New Delhi.
27. Mr. V. V. Apte	The Director of Industries, Bombay.
28. Mr. A. J. B. Lobo	Collector of Customs, Bombay.



APPENDIX III

[See paragraph 12 (b)]

STATEMENT SHOWING THE SUPERVISORY AND ADMINISTRATIVE STAFF EMPLOYED BY MESSRS. GRINDWELL ABRASIVES LTD. SINCE 1945 AND THE NUMBER OF WORKERS EMPLOYED BY THEM SINCE 1948.

(a) Supervisory and administrative staff.

	1945	1948	1950	1951
1. Technical experts	4	4	4	4
2. Supervisors, Trained Staff	24	25	38	40
3. Fitters, turners	7	14	11	14
4. Clerical	-	-	35	38
Peons	38	34	12	12
Godown labour	-	-	7	7
5. Social	1	1	1	1
	74	78	108	116

(b) Male Workers.

	Wages	1948	1949	1950	1951
1. Unskilled	From -/15/- to 1/3/0 basic pay.	145	185	180	177
2. Semi-skilled.	From 1/4/- to 1/8/- basic pay.	93	89	93	72
3. Semi-skilled Group II	From 1/9/- to 1/15/- basic pay.	25	32	35	64

	Wages	1948	1949	1950	1951
4. Skilled Group 1	From 2/-/- to 3/-/- basic pay.	8	14	12	13
5. Skilled Group No.2	From 3/-/- and above basic pay.	9	6	8	10
		280	326	328	333

(c) Women Workers.

	Wages	1948	1949	1950	1951
1. Unskilled labourers	From -/12/- to -/14/- basic pay.	92	104	129	83
2. Semi-skilled Group I	From -/15/- to 1/-/- basic pay.	37	21	25	38
3. Semi-skilled Group II	From 1/1/- to 1/3/- basic pay.	13	9	10	11
4. Skilled Group I	Over 1/3/- basic pay.	3	2	2	2
		145	136	166	137
Total (b) & (c)		425	462	494	473

APPENDIX IV
(See paragraph 13)

**STATEMENT SHOWING THE BREAKDOWN OF THE LAIDED CASES OF ORIENTAL WHEELS INTO C.I.F.,
CLEAVING CHARGES AND CUSTOMS DUTY, AS REPORTED BY THE IMPORTERS AND THE COLLECTORS OF CUSTOMS.**

Sl. No.	Source of Information	Origin of Imports	Date of Imports	Type & Specification	C.I.F. (each)	Customs duty	clearing charges	Rs.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Size 10" x 1" x 1"								
1.	M/s. William Jacks & Co. Ltd., Calcutta.	U.K.	18-7-51	Alorite vitri- fied upto 150 grit.	12 0 11	13 0 9	0 1 10	22 9 6
2.	M/s. Martin Burn Ltd., Calcutta.	U.K.	July '51	Carborundum	9 3 0	9 10 0	0 2 0	18 15 0
3.	-do-	U.K.	Aug. '51	-	10 2 0	10 10 0	0 6 0	21 2 0
4.	-do-	U.K.	Sept. '51	-	10 2 0	10 10 0	0 6 0	21 2 0
5.	The Collector of Customs, Bombay.	U.K.	8-11-51	Carborundum	14 5 4	-	-	-
Size: 12" x 1" x 1"								
1.	M/s. William Jacks & Co. Ltd., Calcutta.	U.K.	18-7-51	Alorite vitri- fied upto 150 grit.	16 10 8	17 0 1	0 2 9	34 5 6
2.	M/s. Scott & Pickett Ltd., Calcutta.	U.K.	18-7-51	Box. Vitrified (Plain)	14 0 0	14 12 0	0 5 6	29 1 6
3.	M/s. Martin Burn Ltd., Calcutta.	U.K.	July '51	-	12 15 0	13 10 0	0 3 0	25 12 0
4.	The Collector of Customs, Bombay.	U.K.	8-11-51	Carborundum Alorite	19 5 4 17 2 8	-	-	-
Size: 12" x 2" x 2"								
1.	M/s. William Jacks & Co. Ltd., Calcutta.	U.K.	18-7-51	Alorite vitri- fied upto 80 grit.	28 11 4	30 2 7	0 4 7	59 2 6
2.	M/s. Martin Burn Ltd., Calcutta.	U.K.	July '51	Carborundum	22 8 6	23 10 6	0 5 0	46 5 0

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
3.	M/s. Martin Burn Ltd., Calcutta.	U.K.	Aug. '61	-	80	1	0	1 5 0 42 7 5
				Other sizes.				
	Collector of Customs, Calcutta.	U.K.	Oct. '61	Alumite Grinding wheels:				
				28" x 3" x 10 3/4"	130	0	0	100%
				6" x 1 1/2" x 2"	6	0	0	"
				34" x 1 1/2" x 1 1/2"	2	12	0	"
				Carborundum Grinding wheels:				
				7 1/2" x 1 1/2" x 1 1/2"	9	0	0	"
				10 1/2" x 5" x 5 1/2"	85	0	0	"
				12" x 6" x 5 1/2"	15	0	0	"
				8" x 3/8" x 1 1/2"	5	0	0	"
	Collector of Customs, Madras.	U.K.	23-7-51	Alumite Grinding wheels:				
				Dia. Thick. Arbor.				
				4 1/2" x 1 1/2" x 1 1/2"	2	15	0	-
				5" x 1 1/2" x 1 1/2"	3	8	6	-
				6" x 1 1/2" x 1 1/2"	4	5	0	-
				7" x 1 1/2" x 1 1/2"	5	5	0	-
				8" x 1 1/2" x 1 1/2"	6	7	0	-
				9" x 1 1/2" x 1 1/2"	8	15	0	-
				10" x 1 1/2" x 1 1/2"	7	3	0	-
				12" x 1 1/2" x 1 1/2"	12	11	0	-
				14" x 3" x 5"	43	5	0	-
	M/s. Pallis (India) Ltd., Bombay.	U.K.	Nil	Valve Seat Grinding Stones 1 1/2" to 3" for Cast Iron and Soft Steel.	66	0	0	69 5 0 1 0 0 136 5 0
				Valve Seat Grinding Stones for per set of 14 pieces.	96	0	0	89 5 0 1 0 0 136 5 0
				Stellite and Hard Steel.				

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
M/s. Hallis (India) Ltd., Bombay	U.K.	M11	Accessories for Valve 6 1/2 x 1 1/2" Refacer 6 1/2 x 1 1/2" Recycled Grinding Part Nos. 4628 & 5521					
M/s. Guy Ward Co., Bombay.	U.K.	80-7-1951	Sanitevitified 55 S 0	82 4 0	1 7 0	125 0 0		
			18" x 2" x 1 1/2" (Plain)					
M/s. H.S. Cox & Co. Ltd., Bombay.	U.K.	29-8-1951	8" x 1" x 5/8" A - 24 - RS (Electronium)	4 13 8	10 0 0	10 4 0	10 4 0	
			8" x 1" x 5/8" CS - 60 - 17 (Carbonium)	8 4 8	17 0 6	17 6 6	17 6 6	
			4" x 1" x 1/2"	2 9 0	5 5 0	5 5 3	5 5 3	
			6" x 1" x 1/2"	4 7 3	9 2 3	9 4 0	9 4 0	
			8" x 1" x 1/2"	6 11 0	13 12 0	14 2 0	14 2 0	
			0" x 1" x 1/2"	5 11 9	11 12 3	12 3 6	12 3 6	
			4" x 1" x 1/2"	1 14 3	3 14 3	4 1 0	4 1 0	
			5" x 1" x 1/2"	3 6 6	7 0 0	7 3 0	7 3 0	
			8" x 1" x 1/2"	3 12 9	7 12 9	8 3 0	8 3 0	
			6" x 1" x 1/2"	4 7 3	9 2 3	9 6 0	9 6 0	
			8" x 1" x 1/2"	6 11 0	13 12 0	14 2 0	14 2 0	
			3" x 1" x 1/2"	1 6 8	2 14 0	3 0 0	3 0 0	

